

Several specimens are sent from Fort Johnston; they were collected in November; their length is from 18 to 20 lines.

Allied to *Haplochilus petersi* (Sauvage), but differing in various particulars.

#### EXPLANATION OF THE PLATES.

##### PLATE LIII.

*Chromis squamipinnis*, p. 621.

##### PLATE LIV.

- Fig. A. *Chromis johnstoni*, p. 622.  
 B. *Chromis subocularis*, p. 621.  
 C. *Chromis tetrastigma*, p. 623.

##### PLATE LV.

- Fig. A. *Chromis lethrinus*, p. 622.  
 B. *Chromis callipterus*, p. 623.

##### PLATE LVI.

- Fig. A. *Chromis kirki*, p. 624.  
 B. *Hemichromis livingstonii*, p. 625.  
 C. *Chromis williamsi*, p. 624.

##### PLATE LVII.

- Fig. A. *Hemichromis modestus*, p. 625.  
 B. *Hemichromis afer*, p. 626.

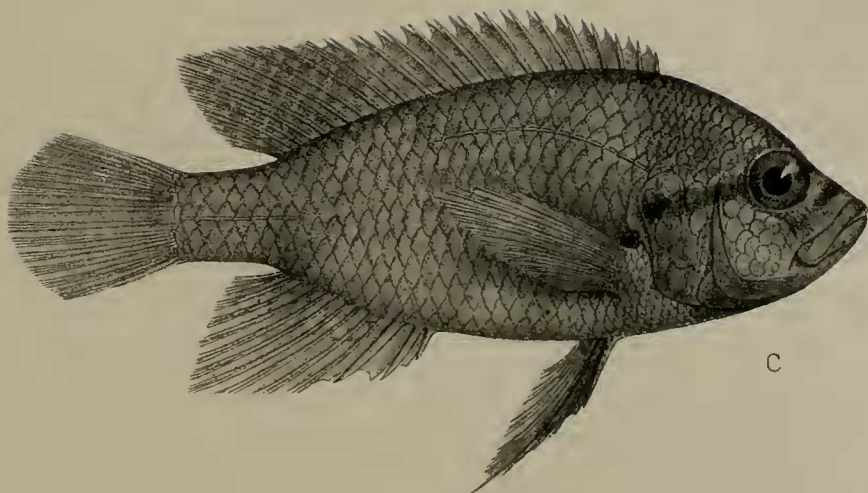
## 2. Descriptions of the Reptiles and Fishes collected by Mr. E. Coode-Hore on Lake Tanganyika. By Dr. A. GÜNTHER, F.R.S., V.P.Z.S.

[Received November 7, 1893.]

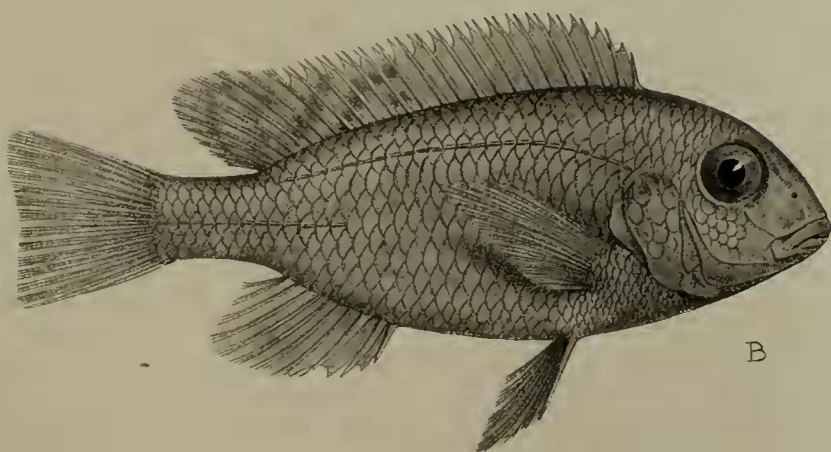
(Plate LVIII.)

Mr. Coode-Hore, who was resident for several years on the shores of Lake Tanganyika, brought home in 1889 a small collection of Snakes and Fishes. The specimens had greatly suffered during the long voyage to England, but some of them were in a sufficiently good state of preservation to be acquired for the British Museum and to be described here. I have deferred an account of them in the hope of seeing them supplemented by subsequent collections; but as it seems desirable to work them out in comparison with those from Lake Nyasa and other parts of Eastern Equatorial Africa, I will not allow the present occasion to pass without giving an account of them.

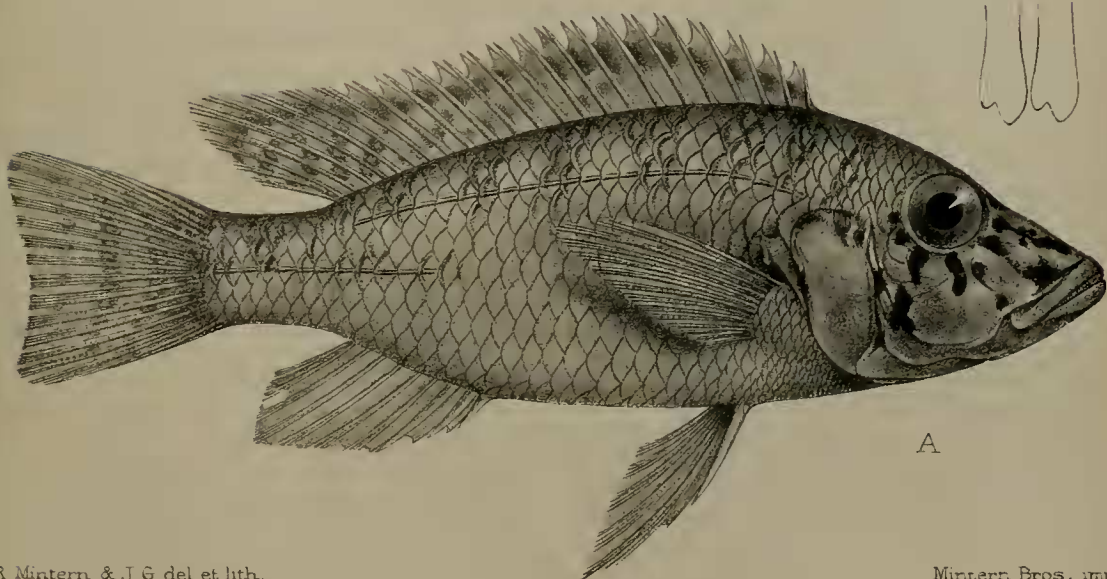
The discovery of two species of *Mastacembelus*, connecting the Asiatic species with the West African, is only one of the interesting facts which a more extended investigation of the Fish-fauna of this remarkable lake is sure to reveal.



C



B



A

R. Mintern & J.G. del et lith.

Minterr. Bros. imp.

CHROMIS.

A CH HOREI. B CH. DIAGRAMMA. C. CH. BURTONI.

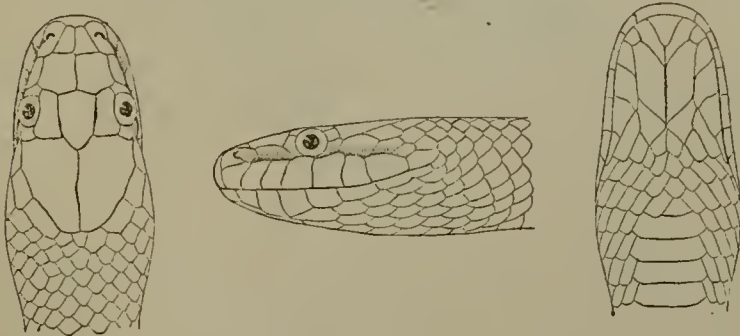
## GLYPHOLYCUS, g. n. Lyeodont.

Allied to *Boodon*, but with the dentition of *Lamprophis*, the maxillary teeth (about eighteen in number) being placed in a continuous series, and the anterior and middle ones being longer and stronger than the posterior; anterior mandibulary teeth stronger than the following. Sides of the head with a deep longitudinal groove or fold which separates the series of upper labials from the shields above. Head rather small and depressed; eyes small, with round pupil; body not compressed; scales smooth, in twenty-one or twenty-three rows; anal entire; subcaudals in two rows; nasal semi-divided; one loreal; anterior frontals pointed in front.

## GLYPHOLYCUS BICOLOR, sp. n.

Vertical shield rather small, not much larger than the supra-ocular; occipital as long as the vertical and posterior frontal together; eight upper labial shields, of which the fourth enters the orbit; rostral shield reaching the upper surface of the head; loreal elongate, one anterior ocular not reaching the upper surface

Fig. 1.

Head of *Glypholyucus bicolor*.

of the head; two posterior oculars; temporals 1+2+3; ventrals 163; subcaudals 56-72. Upper parts uniform brownish lead-coloured; lower parts and the two outer series of scales whitish; a brownish line along the meeting edges of the subcaudals.

Several specimens, of which one measures 26 inches, the tail taking  $5\frac{1}{2}$ .

## MASTACEMBELUS TANGANICÆ, sp. n.

D. 33/56. C. 12. A. 2/61.

Trunk and tail short and compressed, its greatest depth being contained twice and a fourth in the length of the head. Rostral appendage very short. Vertical fins continuous, the length of the tail being but little more than two fifths of that of the head and trunk together.

Dorsal spines short, the distance of the foremost from the operculum being scarcely half the length of the head. Length of

the head one third of that of the trunk. Coloration either uniform brownish, or light coloured with numerous narrow brown cross-bands.

Several specimens, not in a good state of preservation, of which the largest is  $6\frac{1}{2}$  inches long.

*MASTACEMBELUS OPHIDIUM*, sp. n.

D. 31-32/103. C. 7. A. 1/116.

Body exceedingly slender, subcylindrical, its depth being one third of the length of the head. Rostral appendage very short. Vertical fins continuous, the vent being much nearer to the end of the snout than to the caudal fin. Dorsal spines short and feeble, the distance of the foremost from the operculum being only half the length of the head. Length of the head one third of that of the trunk. Scales minute. Coloration apparently uniform brownish.

Several specimens, not in a good state preservation, of which the largest is  $11\frac{1}{2}$  inches long.

*CHROMIS HOREI*, sp. n. (Plate LVIII. fig. A.)

D.  $\frac{16}{8}$ . A.  $\frac{3}{6}$ . L. lat. 28. L. transv.  $\frac{4}{9}$ .

Teeth distinctly bicuspid, the cusps being subequal and slightly tinged with brown; from twenty-eight to thirty-one on each side of the outer series of the upper jaw. Cheeks naked or only with a few extremely thin scales. In a specimen nearly 5 inches long the diameter of the eye is nearly equal to the depth of the soft part of the cheek and a little less than the width of the præorbital and of the interorbital space, which is flat. The angle formed by the præopercular limbs is a right one. The height of the body is somewhat less than the length of the head and one third of the total (without caudal). The longest dorsal spine is the last and is two fifths of the length of the head. Pectoral fin extending to, or nearly to, the origin of the anal. Caudal scaleless. Scales rough, some with the margins ciliated. Body light greenish, with more or less conspicuous incomplete brownish cross-bands on the upper part of the body. The largest specimen has the cheek and snout ornamented with irregular deep brown spots; the soft dorsal and the caudal fin with scattered ocelli; a milky-white spot between the last two anal rays.

Three specimens, the largest  $4\frac{3}{4}$  inches long.

*CHROMIS TANGANICÆ*, sp. n.

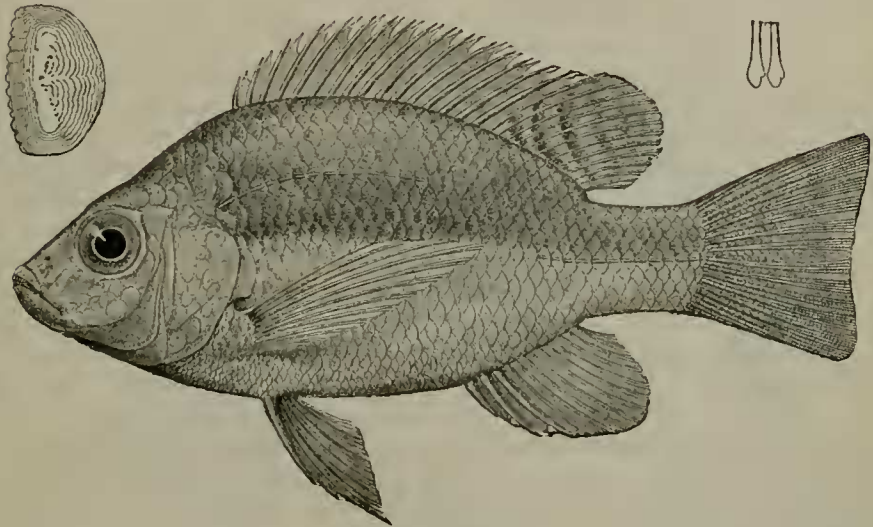
D.  $\frac{16}{11-12}$ . A.  $\frac{3}{9-10}$ . L. lat. 32. L. transv.  $\frac{4}{5 \text{ \& } x \text{ small ones.}}$

Allied to *C. squamipinnis*.

Teeth small, with an obliquely dilated and notched apex; thirty on each side of the outer series of the upper jaw; scales below the eye in three series; in a specimen nearly 4 inches long the diameter of the eye exceeds the width of the præorbital and the depth

of the scaly portion of the cheek, but is less than the width of the interorbital space, which is nearly flat. The two limbs of the præoperculum meet at a right angle; the height of the body is contained twice and a fourth in the total (without caudal), the length of the head twice and four fifths; the longest dorsal spine

Fig. 2.

*Chromis tanyanice.*

is less than one half of the length of the head. Caudal scaleless. Pectoral fin extending beyond the origin of the anal. Scales with concentric rough undulating ridges. Coloration uniform greenish with silvery reflections.

Three specimens.

*CHROMIS BURTONI*, sp. n. (Plate LVIII. fig. C.)

D.  $\frac{14}{11}$ . A.  $\frac{3}{9}$ . L. lat. 27. L. transv.  $\frac{3\frac{1}{2}}{9}$ .

Teeth small, each with a small outer cusp, twenty-eight on each side of the outer series of the upper jaw. Scales below the eye in four or five series. In a specimen nearly 4 inches long the diameter of the eye equals the width of the præorbital and of the interorbital space, which is slightly convex transversely, but has a concave longitudinal profile; the depth of the scaly portion of the cheek is distinctly more than the width of the orbit. The angle formed by the præopercular limbs is a right one. The height of the body is rather more than the length of the head, which is one third of the total (without caudal). The length of the last dorsal spine is two fifths of that of the head; caudal with convex

posterior margin; pectoral fin extending to the origin of the anal. Scales rough, apparently uniform greenish, with a blackish spot on the end of the operculum; two narrow blackish bars across the upper surface of the snout; the soft dorsal with a row of rounded darker spots behind each ray.

One specimen.

CHROMIS DIAGRAMMA, sp. n. (Plate LVIII. fig. B.)

D.  $\frac{17-18}{10}$ . A.  $\frac{3}{7}$ . L. lat. 30. L. transv.  $\frac{3\frac{1}{2}}{7 \text{ \& } x \text{ very small ones.}}$

This species has the upper profile of the head descending in a curve, reminding one of *Diagramma*. Teeth bicuspid, the inner cusp being the longer and brown; twenty-eight on each side of the outer series of the upper jaw. Scales below the eye in four series. In a specimen  $3\frac{3}{4}$  inches long the diameter of the eye equals the width of the præorbital and the depth of the scaly portion of the cheek, but is less than the width of the interorbital space, which is convex. The angle formed by the præopercular limbs is a right one. The height of the body is rather more, and the length of the head less, than one third of the total (without caudal). The length of the last dorsal spine is two fifths of that of the head; caudal scaleless, with vertical posterior margin; pectoral fin extending to or nearly to the origin of the anal. Scales rough, with minute spines on the margin. The coloration seems to be uniform greenish, in the smaller specimens with indistinct narrow darker cross-bands.

Three specimens, the largest of which is  $3\frac{3}{4}$  inches long.

#### EXPLANATION OF PLATE LVIII.

- Fig. A. *Chromis horei*, p. 630.  
 B. *Chromis diagramma*, p. 632.  
 C. *Chromis burtoni*, p. 631.

3. On a Collection of Land and Freshwater Shells transmitted by Mr. H. H. Johnston, C.B., from British Central Africa. By EDGAR A. SMITH.

[Received August 28, 1893.]

(Plate LIX.)

The specimens comprised in this collection were obtained partly by Mr. R. Crawshay at Lake Mweru, Lake Tanganyika, and on the northern part of Lake Nyasa, and partly by Mr. A. Whyte at the southern end of the last-mentioned lake. They have been presented to the British Museum by H. H. Johnston, Esq., C.B., H.M. Commissioner in British Central Africa, to whom that insti-